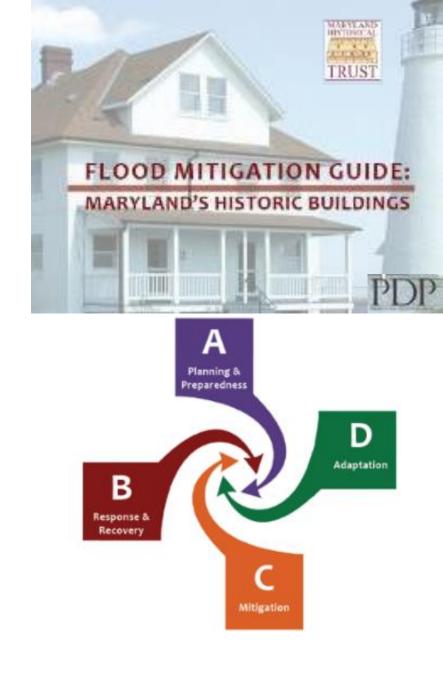


MHT's Flood Mitigation Guide

- Purpose A "road map" to aid local governments and preservation advocates protect historic properties in their community from flood hazards
- Audience Anyone in state or local government attempting to meet combined goals of historic preservation and emergency management
- Organization Follows the emergency management cycle and also addresses "Adaptation"



Hazard Mitigation Planning Process

2.A.8

2.A.9

000



What is "Important"?



Visual Preference Survey



Rate the places that **matter most to you** in your experience of the Annapolis historic district.

1 (most important) to 12 (least important)









☐ Historic Buildings





■ Market House



☐ Kunta Kinte – Alex Haley Memorial

Who Decides What is Important?

The Community?

The Planning Team?

Preservation Stakeholders?

All of them.



Preparing for Prioritization



- Results of your research on the planning context
 - Existing preservation priorities
 - Existing flood mitigation priorities
- Rationale for your planning timeline



• Results of the risk assessment



Which historic resources are located in the high hazard areas



The vulnerability of those resources to the hazard (high, medium, low)



 Gaps in where historic resources are located in relation to high hazard areas

Engage the Public



Design charrette for the community to identify mitigation actions in Historic Annapolis during the planning process for the Weather It Together: Cultural Resources Hazard Mitigation Plan. Photo Source: Alicia Moran, 2016.

Community-Driven Prioritization



- Critical to Sense of Place
- Vulnerable to flood hazard
- Economic contribution
- Other considerations



Community-Driven Prioritization Factors



- Critical to Sense of Place Essential to maintaining a community's social and cultural identity and/or physical appearance
- Vulnerable to flood hazards Most at risk to damage or destruction by flood
- Economic contribution Does (how much) the resources contribute to the economic health of the community?
- Other considerations To be defined by the community and/or Planning Team

Ranking Community-Driven Prioritization Factors

Resource	Critical	Vulnerable	Economic	Natural	Other	Priority
100 Main St	Medium	High	High	High	Low	High
102 Main St	High	Low	Low	Low	Low	Low
54 Water St	Low	High	Medium	Low	Low	Low
73 Water St	Medium	Medium	Medium	High	Medium	Medium









From Priorities to Mitigation Goals & Objectives

Mitigation Goals

- 1. Preserve the community's unique heritage and sense of place by protecting historic resources from flood hazards through preservation-sensitive mitigation actions
- 2. Minimize alteration, destruction, and loss of historic fabric or design
- 3. Increase public awareness of flood hazards that affect historic resources
- 4. Align land use, economic development, environmental, and regulatory activities to protect the community's historic resources

Mitigation Objectives 🤐

- Incentivize property maintenance and rehabilitation to enhance the ability of historic resources to withstand the impacts of flood hazards
- 2. Implement model flood mitigation actions for historic resources
- 3. Inform owners of historic resources in high hazard areas about their vulnerability to flood hazards, and offer technical assistance and incentives for owners to take action to reduce their risk
- 4. Develop design guidelines to identify preservation-sensitive mitigation actions supported by the community's regulatory activities

Identifying Mitigation Actions



- Does the community have a traditional adaptation to changing environmental conditions?
- Could the resources be protected by a community-wide project?
- Are there mitigation actions that meet multiple goals (e.g. preserving historic landscapes and protecting natural resources)?

• Do you have a *mitigation action* that reduces the community's vulnerability to *each hazard* identified in the risk assessment?

Community-Wide Mitigation Actions







Left: A floodwall along the river protects the historic neighborhoods behind it.

Right: Unfortunately, this historic community was too far gone to save. Properties were dilapidated due to frequent flooding and much of the community's sense of place had eroded. All but the church and a handful of other building remain and interpretive signs to orient visitors as to what this community once was.

Property-Specific Mitigation Actions





Left: The historic house on the far left has been reset on an elevated foundation to lift its first floor above predicted flood levels.



Right: This water-oriented historic oyster packing house is now a museum. It has been modified to allow floodwater to enter and exit the building without damaging interior finishes, fixtures, or displays (which are set on wheels and can be moved if there is adequate warning).

Evaluating Mitigation Actions 🙀



Is your project feasible?

- S –Social
- T Technical
- A Administrative
- P Political
- L Legal
- E Economic
- E Environmental



This log cabin was moved to a less vulnerable location after narrowly avoiding destruction by a flash flood. Photo Source: B. Burgess, 2018.

Prioritizing Mitigation Actions 🕮





Priority Ranking Category	Mitigation Action / Project Title				
HIGH	#1 - Completion of Elevation Certificates for Historic Properties at Risk to Flooding #8 - Conduct Survey & Evaluation of Historic Properties and other Cultural Resources in Coastal High Hazard Areas - Zones AE & VE				
MEDIUM	#4 - Flood Risk Assessment Screen for Coastal Hazards for Architectural & Archeological Survey Collector Application #5 - Flood Mitigation Guidance for Historic Properties #7 - Education & Outreach on Historic Properties and Coastal Hazards Mitigation and Climate Change Resiliency				
LOW	#9 - Hazard Mitigation / Climate Resiliency Officer Position #25 - Archeological Survey on State-Owned Land & Water in High Hazard Areas				

Historic Resources Mitigation Actions as Prioritized by the Mitigation Advisory Committee for the Maryland State Hazard Mitigation Plan (2016)

Summary

After completing this portion of the planning process, you will have:

- Set preservation priorities based on the community's preferences
- Developed mitigation goals and objectives that are consistent with local planning documents, address the vulnerabilities identified during the risk assessment, and set forth a long-term strategy for addressing those vulnerabilities
- Identified and evaluate mitigation actions that reduce or avoid longterm vulnerability to flood hazards identified in the risk assessment
- Finalized the list of mitigation actions according to the community's preferences

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http://mht.maryland.gov/weatherit.shtml



